



# Australian Industry Report

## Biodegradable Plastics

**August 2005**

**Australia**

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### SUMMARY

Australians consume about 6.9 billion plastic bags annually with up to 80 million plastic bags finding their way into the litter stream. In 2003, the Australian Federal Government attempted to address the adverse environmental impact of plastic bags by challenging retailers to meet a range of targets relating to the reduction and recycling of retail carry bags. In response to this challenge the Australian Retailers' Association developed a Code of Practice for the Management of Plastic Bags.

Despite this voluntary code and the targets set, the market for biodegradable bags is currently very limited due to the fact that relevant Australian Standards for degradable plastics do not yet exist. These standards are being developed and will play an important role in addressing the concern that some products currently on the market do not meet their degradability claims. It is anticipated that the standards will be released in August 2006. Until the standards are made available, the Australian Retailers' Association (ARA) has advised retailers against the use of degradable bags.

A report undertaken by Nolan-ITU on behalf of the Federal Government identified the following emerging or potential applications for biodegradable plastics in Australia:

- Coated or laminated paper used within the retail food sector
- Agricultural mulch film that currently requires mechanical removal
- Shopping Bags
- Food waste film and bags
- Consumer Packaging Materials which are currently not recycled
- Landfill cover film which could serve to extend the life of the landfill
- Other applications such as bait bags, fishing line and nets, silage wrap, sanitary products, and cling wrap

With the introduction in 2006 of Australian standards for degradable plastics, and as buyers verify the claims made by both local and overseas producers (via overseas certification programs), the market for biodegradable plastics is likely to significantly grow.

## MARKET OVERVIEW

The market for biodegradable bags is currently very limited due to the fact that relevant Australian Standards do not yet exist. These standards are being developed and will play an important role in addressing the concern that some products currently on the market do not meet their degradability claims. It is anticipated that public comment will be sought in September 2005 on a draft version of the standards with the aim of releasing official standards in August 2006. Until the standards are made available, the Australian Retailers Association has advised retailers against the use of degradable bags.

Australians consume about 6.9 billion plastic bags annually with up to 80 million plastic bags finding their way into the litter stream. The most common form of plastic bag used in Australia is made of high density polyethylene (HDPE). These bags are primarily used in supermarkets and smaller retail outlets such as petrol stations, newsagents, and mixed-business stores. Of the 6.9 billion plastic bags consumed, about 900 million are made of low density polyethylene (LDPE) and are primarily used within the clothing and department store sectors.

An October 2002 study by Nolan-ITU Pty Ltd, on behalf of the Department of the Environment and Heritage found that 53 percent of bags were supplied by supermarkets. The report further estimated that 67 percent of HDPE bags (about 225 million bags) were imported in 2001-2002. The two main plastic bag manufacturers in Australia were Detmark Poly Bags (Victoria) and S-Pak Australia Pty Ltd (Queensland). While imports satisfy the bulk of demand for HDPE bags, locally produced LDPE bags hold a larger share of the market than their imported counterparts.

The impetus to address the adverse environmental impact of plastic bags came in 2003 when the Environment Protection and Heritage Council (EPHC) challenged retailers to meet a range of targets relating to the reduction and recycling of retail carry bags. These targets included a 25 percent reduction in the number of bags issued by the end of 2004 against the base of December 2002 and a 50 percent reduction by the end of 2005. In response to this challenge the Australian Retailers' Association (ARA) developed a Code of Practice for the Management of Plastic Bags. This included a commitment to the EPHC targets. The EPHC targets and the ARA Code adopt a focus on lightweight HDPE carry bags rather than LDPE and other bags.

In addition, the Department of the Environment and Heritage (DEH) is working cooperatively with the Plastics and Chemicals Industry Association (PACIA) and the Vinyl Council of Australia to identify and address priority environmental issues, particularly those related to resource use, reuse and recovery. The plastics industry is the second largest manufacturing sector by turnover and a substantial contributor to other sectors such as automotive and packaging. The main role of DEH is to:

- Support voluntary industry-led product stewardship;
- Assist in the development of Australian Standards;
- Raise community awareness.

PACIA represents companies that manufacture and distribute both conventional and degradable plastics as well as plastics re-processors. PACIA has developed a Common Framework for the use of degradable plastics in Australia in consultation with DEH and other stakeholders designed to guide the self-regulation of degradable plastics.

A March 2005 study by Nolan-ITU Pty Ltd into plastic retail carry bag consumption between 2002-2004 drew the following conclusions:

- Between 2002-2004 there was an estimated 20.4% reduction (or 1.22 billion bags) in the consumption of lightweight HDPE bags.
- Most of the reduced consumption of lightweight HDPE bags was generated by the supermarket sector (about 25%).
- The reduction in LDPE shopping bags has been less significant. This possibly reflected the lack of a national policy to reduce the use of LDPE bags and a lower level of reduction activity amongst non-supermarket sectors.
- Increased consumer awareness, better staff training and the more widespread availability and use of heavier duty reusable carry bags were the main reasons for the reduction in plastic bag usage.

The report also notes that there was concern among some retailers that the reduction may represent a 'harvesting of the low hanging fruit' and the target of reaching a 50% reduction from 2002 consumption by the end of 2005 will be more difficult to achieve. Such a target would necessitate the focus and participation of all retail sectors.

A copy of the 2005 report can be obtained from the Department of the Environment & Heritage's website at: <http://www.deh.gov.au/settlements/waste/plastics.html>

## MARKET TRENDS

The Australian Retailers' Association's end of year 2004 audit on plastic bag usage by the four major supermarket chains -Coles, Woolworths, Franklins and FAL reported the following:

- As of December 2004, the retailers achieved a reduction of 26.9 percent in the annualized rate of plastic bags distributed (against the 2002 baseline).
- All four chains have developed and implemented reusable options.
- All four chains had "multiple use" bags available and offered customer information on reusable options.
- All four retailers used HDPE bags containing recycled content, with three out of four using bags with domestic content. However limited supply of domestic recycled materials restricted the use of this option.
- All four retailers provided recycling stations to customers.
- The retailers achieved a 3.2 percent recycling rate for HDPE bags returned in store as a percentage of total HDPE bags issued.

The October 2002 Nolan-ITU report, which was previously mentioned, identified the following emerging or potential applications for biodegradable plastics in Australia:

- Coated or laminated paper used within the retail food sector.
- Agricultural mulch film that currently requires mechanical removal.
- Shopping bags.
- Food waste film and bags.
- Consumer packaging materials which are currently not recycled.
- Landfill cover film which could serve to extend the life of the landfill.
- Other applications such as bait bags, fishing line and nets, silage wrap, sanitary products, and cling wrap.

In October 2003 the Environment Protection and Heritage Council, comprised of Australian Environment Ministers, agreed to initiate the development of Australian standards for degradable plastics by Standards Australia, the peak non-government standards development body in Australia. A technical committee known as the EV-017 has been set up to prepare draft standards. It is anticipated that in September 2005

the committee will invite public comment on the draft standards with the aim of releasing official standards in August 2006.

Unless required by legislation (such as the Trade Practices Act 1974), these standards will remain voluntary. While there are several overseas certification programs for degradable plastics, none exist in Australia. The need for certification in Australia, including the possible adoption of overseas certification systems is under investigation by the Department of the Environment and Heritage in consultation with stakeholders.

## END USERS

According to the Australian Retailers' Association, the major and smaller supermarket chains and independent supermarkets sponsored by wholesalers or under banner groups have signed on to the Code of Practice for the Management of Plastic Bags. Under the Code these companies are known as Group One signatories and include:

- Bi-Lo
- Coles Supermarkets Australia Pty Ltd
- Foodland Associated Limited
- Australian United Retailers/Food Works (AUR)
- Franklins Pty Ltd
- IGA (including Ritchies)
- Officeworks
- Woolworths Supermarkets (including Safeway)

The four major supermarket chains are Woolworths, Coles, Franklins and Foodland Associated Limited. These chains deal directly with suppliers. The remainder of the retail grocery sector is made up of independent retailers varying in size from small corner stores to large supermarkets. Many of these independents operate as part of banner groups, often allowing them to coordinate on promotional efforts, signage, and pricing. Banner groups also work closely with a particular wholesaler to achieve better economies of scale in purchasing. IGA is the most well known banner group.

In 2000, the Shopping Centre Council of Australia reported that there were 63 regional centers (ie. centers that have at least one major department store), 217 discount department store based centers, and 599 supermarket based centers.

## MARKET ACCESS

Australia and the United States recently enacted a Free Trade Agreement (FTA). As of January 1, 2005, duties on more than 99 percent of tariff lines, including plastic products and organic chemicals, have been eliminated. Prior to the FTA, the maximum general tariff on such goods was five percent.

Both imported and locally manufactured products are subject to a Goods and Services Tax (GST). The GST is a broad-based tax of ten percent on the supply of most goods and services consumed in Australia. It is akin to the value-added tax systems in Canada and Europe.

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## MARKET ENTRY

Success in the Australian market requires establishing a local sales presence. For American manufacturers of biodegradable plastics this means appointing an agent or distributor. The bounds of that appointment are negotiated, and may include only certain states of Australia, the entire country, or New Zealand as well. An increasing number of businesses and investors see Australia as a secure platform from which to serve third markets in Asia.

Most of the criteria American firms use to select agents or distributors can be transferred to Australia, with expectations adjusted to the scale of the market. Performing due diligence is just as important as in the United States, and numerous resources are available to assist in that work.

The standard forms of trade finance are all prevalent and widely used in Australia. In the private sector, bank and institutional financing is available. Historically, however, the banking sector has not been a major source of capital for small startup companies investing in the development of new technology.

The method, timing and arrangements for payment are a matter for negotiation between the U.S. exporter and Australian customer. The agreement reached will depend on the relative bargaining strengths of the two parties, the creditworthiness of the buyers and the financial resources of the seller. Generally, however, payment terms of between 30-60 days are considered the norm for small-to-medium consignments and up to 90 days for large volume purchases. The method of payment is usually by letter of credit or sight draft.

## SERVICES OFFERED BY THE U.S. COMMERCIAL SERVICE

The U.S. Commercial Service can assist American companies in the Australian market with the following services:

- A. Customized Market Research (CMR): is recommended as the entry-level step to determine prospects for a company's products or services, and as a tool to identify market opportunities and representation interest. Based on the finding of a CMR, a proposed customized market strategy is then prepared which could include either our International Partner Search or Gold Key Matching service.
- B. International Partner Search (IPS): involves a search to identify up to five qualified Australian agents, distributors, or joint venture partners who have examined a U.S. company's materials and have expressed an interest in the company's products or services.
- C. Gold Key Matching Service (GKS): schedules meetings with local companies for visiting U.S. firms.
- D. Platinum Key Service (PKS): is solution-oriented and designed to support U.S. companies who require ongoing assistance. The fee is dependent on the scope of the market development assistance required.
- E. International Company Profile (ICP): designed to assist U.S. companies evaluate potential business partners by providing a detailed report on Australian companies. Through the service, clients can request answers to detailed questions about Australian companies on a variety of issues and receive advice about the relative strength of the firm in its market and its reliability, among other things.

For more information on any of these services please contact your nearest U.S. Department of Commerce Export Assistance Center or visit our website at [www.BuyUSA.gov/Australia](http://www.BuyUSA.gov/Australia)

## KEY CONTACTS

### **Plastics and Chemicals Industry Association**

Level 2 263 Mary St

Richmond VIC 3121

Tel: 61-3-9429 0670

Fax: 61-3-9429 0690

Email: [info@pacia.org.au](mailto:info@pacia.org.au)

Website: [www.pacia.org.au](http://www.pacia.org.au)

Purpose: Peak national association representing the plastics, chemicals, adhesives and sealants industries in Australia.

### **Australian Retailers Association**

Association House, Level 2 104 Franklin Street

Melbourne Victoria 3000

Tel: 61-3-9321 5000

Fax: 61-3-9321 5001

Email: [info@ara.com.au](mailto:info@ara.com.au)

Website: [www.ara.com.au](http://www.ara.com.au)

Purpose: Key national employer association representing the retail industry.

### **National Association of retail Grocers of Australia**

C/- Suite 506, Level 5, 159 Church Street

PARRAMATTA, NSW 2150

Phone (02) 9806 1915

Fax (02) 9806 1910

Website: [www.narga.com.au](http://www.narga.com.au)

Contact: Mr Alan McKenzie

Purpose: Federation of associations representing independent grocery retailers nationally.

### **Environment Business Australia**

PO Box 5364

Kingston ACT 2604

Tel: 61-2-6270 1333

Fax: 61-2-6270 1300

Email: [eba@environmentbusiness.com.au](mailto:eba@environmentbusiness.com.au)

Contact: Ms Fiona Wain, Chief Executive Officer

Purpose: National association representing providers of environmental management goods and services. Works closely with Federal and State Government organisations.

### **Australian Bioplastics Association**

<http://www.bioplastics.org.au/>

Purpose: The ABA is a newly formed association. Please see their website for member details.

## UPCOMING TRADE SHOWS

### **AUSPLAS 2005**



Date: September 26-29, 2005  
Location: Melbourne Convention and Exhibition Centre  
Organizer: Exhibition Management Pty Ltd  
179 Park Street (PO Box 1192)  
South Melbourne Vic 3205  
Tel: 61-3-9699 4699  
Fax: 6-3-9690 9333  
Email: [info@exhibitionmanagement.com](mailto:info@exhibitionmanagement.com)  
Website: [www.ausplas.com](http://www.ausplas.com)

AUSPLAS, Australia's International Exhibition for the Plastics Industry is the largest and longest running event of its type in the Southern Hemisphere. It has been held every three years since 1987 and at irregular intervals since 1964.

### **Enviro 06 Conference & Exhibition**

Date: May 8-10, 2006  
Location: Melbourne Exhibition and Convention Centre  
Organizer: Quitz Pty Ltd  
PO Box 632  
Willoughby NSW 2068  
Tel: 61-2-9410 1302  
Fax: 61-2-9410 0036  
Email: [quitz@bigpond.net.au](mailto:quitz@bigpond.net.au)  
Enviro is a biannual trade show aimed at the general environmental industry.

End of report